U.S. Application No.: 10/516,708

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1-8. (canceled).

9. (previously presented): A solder comprising zinc at 7 to 10 weight % both inclusive,

bismuth at 1 to 6 weight % both inclusive, silver at X weight % wherein X is equal to or greater

than 0.025, but smaller than 0.1, and the remainder of tin, said solder being lead-free.

10. (previously presented): The solder as set forth in claim 9, wherein said solder is in

the form of powder.

11. (previously presented): The solder as set forth in claim 10, wherein said powder has a

diameter in the range of 20 to 40 micrometers both inclusive.

12. (previously presented): The solder as set forth in claim 10, wherein a difference

between a maximum diameter of said powder and a minimum diameter of said powder is equal

to or smaller than 10 micrometer.

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13. (previously presented): The solder as set forth in claim 10, wherein said solder is

mixed in flux, said flux having a concentration in the range of 9 to 13 weight % both inclusive.

14. (canceled).

15. (previously presented): A solder comprising Sn-Zn alloy(s) having a single composition ratio or a plurality of composition ratios, and Sn-Bi-Ag alloy(s) having a single composition ratio or a plurality of composition ratios, said solder including zinc at 7 to 10 weight % both inclusive, bismuth at 1 to 6 weight % both inclusive, silver at X weight % wherein X is equal to or greater than 0.025, but smaller than 0.1, and the remainder of tin when said alloys are

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16. (previously presented): The solder as set forth in claim 15, wherein said solder is in

the form of powder.

17. (previously presented): The solder as set forth in claim 16, wherein said powder has

a diameter in the range of 20 to 40 micrometers both inclusive.

melted in mixture, said solder being lead-free.

18. (previously presented): The solder as set forth in claim 16, wherein a difference

between a maximum diameter of said powder and a minimum diameter of said powder is equal

to or smaller than 10 micrometer.

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mixed in flux.

19. (previously presented): The solder as set forth in claim 16, wherein said solder is

20. (previously presented): The solder as set forth in claim 19, wherein said flux has a

concentration in the range of 9 to 13 weight % both inclusive.

21. (previously presented): A circuit substrate unit comprising a circuit board, and at

least one electronic component soldered onto said circuit board,

wherein said electronic component is soldered onto said circuit board through a solder,

and

said solder contains zinc at 7 to 10 weight % both inclusive, bismuth at 1 to 6 weight %

both inclusive, silver at X weight % wherein X is equal to or greater than 0.025, but smaller than

0.1, and the remainder of tin, said solder being lead-free.

22. (previously presented): The circuit substrate unit as set forth in claim 21, wherein

said solder is in the form of powder.

23. (previously presented): The circuit substrate unit as set forth in claim 22, wherein

said powder has a diameter in the range of 20 to 40 micrometers both inclusive.

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24. (previously presented): The circuit substrate unit as set forth in claim 22, wherein a

difference between a maximum diameter of said powder and a minimum diameter of said

powder is equal to or smaller than 10 micrometer.

25. (previously presented): The circuit substrate unit as set forth in claim 22, wherein

said solder is mixed in flux.

26. (previously presented): The circuit substrate unit as set forth in claim 25, wherein

said flux has a concentration in the range of 9 to 13 weight % both inclusive.

27. (previously presented): A circuit substrate unit comprising a circuit board, and at

least one electronic component soldered onto said circuit board,

wherein said electronic component is soldered onto said circuit board through a solder,

and

said solder contains Sn-Zn alloy(s) having a single composition ratio or a plurality of

composition ratios, and Sn-Bi-Ag alloy(s) having a single composition ratio or a plurality of

composition ratios, said solder including zinc at 7 to 10 weight % both inclusive, bismuth at 1 to

6 weight % both inclusive, silver at X weight % wherein X is equal to or greater than 0.025, but

smaller than 0.1, and the remainder of tin when said alloys are melted in mixture, said solder

being lead-free.

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28. (previously presented): The circuit substrate unit as set forth in claim 27, wherein said solder is in the form of powder.

- 29. (previously presented): The circuit substrate unit as set forth in claim 28, wherein said powder has a diameter in the range of 20 to 40 micrometers both inclusive.
- 30. (previously presented): The circuit substrate unit as set forth in claim 28, wherein a difference between a maximum diameter of said powder and a minimum diameter of said powder is equal to or smaller than 10 micrometer.
- (previously presented): The circuit substrate unit as set forth in claim 28, wherein said solder is mixed in flux.
- 32. (previously presented): The circuit substrate unit as set forth in claim 31, wherein said flux has a concentration in the range of 9 to 13 weight % both inclusive.
- 33. (previously presented): The solder as set forth in claim 9, wherein said solder comprises said silver at 0.025 to 0.08 weight % both inclusive.
- 34. (previously presented): The solder as set forth in claim 15, wherein said solder comprises said silver at 0.025 to 0.08 weight % both inclusive.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)

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35. (previously presented): The circuit substrate unit as set forth in claim 21, wherein said solder contains said silver at 0.025 to 0.08 weight % both inclusive.

36. (previously presented): The circuit substrate unit as set forth in claim 27, wherein

said solder contains said silver at 0.025 to 0.08 weight % both inclusive.

37-40. (canceled).

41. (new): The solder as set forth in claim 9, wherein the solder is a solder for

connecting an electronic component to a circuit board.

42. (new): The solder as set forth in claim 15, wherein the solder is a solder for

connecting an electronic component to a circuit board.